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10/737,184	12/16/2003	Ragip Kurceren	944-001.121	5545

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EXAMINER

WERNER, DAVID N

ART UNIT	PAPER NUMBER
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2621

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/737,184

Applicant(s)

KURCEREN ET AL.

Examiner

David N. Werner

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>20040317, 20050713</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Drawings

1. Figures 1–3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-7, 13-21, and 27 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3, 11-12, 15-18, 23, and 24 of copending Application No. 10/798,825. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are both directed at editing transform-domain video by modifying coefficients of transformed video data with editing data. Method claims 1-7 are in conflict with claims 1-3 and 11-12, "video editing device" claims 13-18 are in conflict with claims 15-18, "electronic device" claims 18-21 are in conflict with claim 23, and software claim 27 is in conflict with claim 24.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 27-32 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 27-32 recite "a software program". Claims directed to software *per se* or not explicitly claimed as encoded in a computer-

readable medium have been held as non-statutory. See *Warmerdam*, 33 F.3d at 1360-61, 31 USPQ 2d at 1759.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-10 and 13-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,802,226 A (Dischert et al.) in view of US Patent 6,526,099 B1 (Christopoulos et al). Dischert et al. teaches a video editor that operates on frequency-domain video (abstract). Regarding the obtaining data from a video bitstream in claims 1, 13, and 18, figure 3A shows VIN video stream from a video source to a memory 330 and mixer 320. The memory and mixer are controlled by control 350. Regarding the modification of video data with additional data in claims 1, 13, 18, and 27, Dischert et al. modifies video data by producing a fade effect from one video clip to another. Then, one scene of the video may serve as primary video data, and a second scene of the video may serve editing data. Regarding the modification of transform-domain video in claims 2, 5-7, 13, 18, and 27, figure 8 shows video data processed through DCT 60 before being input into mixer 80. Regarding the compressed bitstream in claims 4, 14, and 19, figure 6 shows video data processed through run-encoder 64 and variable-length encoder 66, and regarding the quantized

data in claims 6, 7, and 17, figure 6 shows video data processed through quantizer 62. Regarding the coded data in claim 7, Dischert et al. discloses that the video data is encoded with an error correction code (ECC) encoder (column 4, lines 55-57).

Regarding the fade to a color in claims 8 and 31 and the fade to black in claim 9, Dischert et al. discloses that video data may be faded to black as part of a transition sequence (column 7, lines 5-9). Regarding the addition of editing data to a bitstream in claims 13, 18, and 27, figure 10A of Dischert et al. shows a first video bitstream input through terminal 100 and a second video bitstream input through terminal 102 and added by adder 105. Regarding the inverse quantization in claims 14 and 19, figure 7 shows decoder 510 with inverse DCT 76. Regarding the combination of editing data to transform coefficients in claims 15 and 20, mixer 80 takes as input a series of frequency coefficients (column 7, lines 14-16). Regarding the secondary editing in claims 16 and 21, figure 10A shows a two-step mixer that multiplies video signals by a coefficient and then adds them (column 7, lines 1-12).

Regarding the camera in claim 22 and the storage medium in claim 25, figures 3A and 3E show two embodiments of the apparatus of Dischert et al., including camera 310 and VTR 340. Regarding the decoder in claim 24, figure 5 shows video data processed through decoder 510 before output. The label of "Audio" output from D/A converter 504 should be video (column 5, lines 31-38). Regarding the multiplication operation of claims 28 and 30, figure 10A shows a mixer with first multiplier 104 that multiplies a first video stream by coefficient K and second multiplier 102 that multiplies a second video stream by coefficient J (column 6, line 65 – column 7, line 4), and

regarding the addition operation of claims 29 and 30, adder 105 adds the signals edited by the two multipliers.

Although Dischert et al. specifies ECC-encoded video data, Dischert et al. is silent on residual video data or error video data. Christopoulos et al. teaches a transcoder that operates on spatial domain or frequency domain (abstract). Regarding the residual data in claims 1, 3, 5-7, 13, 18, and 27-30, Christopoulos et al. operates on video that has been coded with predictive coding. In predictive coding, instead of transmitting every pixel value, instead only the variation between pixels is transmitted (column 1, lines 40-49). Regarding the error data in claims 3, 5, 13, and 18, this value is a prediction error from the assumption that pixel values are related in a certain way. Regarding the receiver in claim 23 and the transmitter in claim 26, Christopoulos et al. incorporates a receiver into the transcoder (column 9, lines 11-13, 19-35), and outputting an encoded video stream via a transmitter (column 2, lines 10-17). Regarding the software code that provides editing data in claim 27, the transcoder of Christopoulos et al. operates by performing editing operations on a video stream, such as introducing DCT values or motion vectors for an image with a new resolution, and may be implemented in hardware or in software (e.g. column 8, lines 31-32; column 8, lines 66-67). Dischert et al. discloses the claimed invention except for modifying residual error video data. Christopoulos et al. teaches that it was known to perform functions on predictive-coded video data. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to operate on predictive-coded video data as taught by Christopoulos et al., since Christopoulos et al.

states in column 1, lines 15-31, that such a modification would allow the transmission of high-quality images over a narrow bandwidth.

Regarding the fade to white in claim 10, Dischert et al. only teaches a fade to black. However, it would have been a matter of obvious design choice to one having ordinary skill in the art to fade to any desired color, since the applicant has not disclosed that fading to any arbitrary color, including white, solves any stated problem or is for any particular purpose, and it appears the invention would perform equally well with fading to white.

8. Claims 11-12 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dischert et al. in view of Christopoulos et al. as applied to claims 1 and 27 above, and further in view of US Patent 5,477,276A (Oguro). Although Dischert et al. teaches a video editor that performs basic operations such as a dissolve, a cross-fade, and a fade to black on frequency-domain data, it does not teach advanced editing effects. Oguro teaches a DSP apparatus that performs advanced fading effects. Regarding the fade from one color to another in claims 11 and 32, Oguro can fade in or fade out to any arbitrary color (column 11, lines 22-27; lines 46-51). Regarding the fade to monochrome in claim 12, the fade system of Oguro may operate only on Y (luminance) values and not process C (chrominance) values, thus performing only black-and-white fade operations (column 11, lines 6-21). Dischert et al. in combination with Christopoulos et al. teach the claimed invention except for advanced fading techniques. Oguro teaches that it was known to perform fading techniques such as a fade to color or

monochromatic fade. Therefore, it would have been obvious to one having ordinary skill of the art at the time the invention was made to apply the fading of Oguro to the editor of Dischert et al., since Oguro states in column 11, lines 29-51 that such a modification would simplify the circuitry needed in a fading device.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David N. Werner whose telephone number is (571) 272-9662. The examiner can normally be reached on Monday-Friday from 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571) 272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

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USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DNW

~~APPROVED~~
~~PRIMARY EXAMINER~~